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E. I. DU PONT DE NEMOURS & COMPANY
PIGMENTS DEPARTMENT

CC: G. A. Christian - Engr. Dept. - Lvrs.
R. M. Salemi

Newport, Delaware
November 10, 1970

R. J. LOMBARDO 6362
WILMINGTON-

ENVIRONMENTAL CONTROL - NEWPORT PLANT

INTERIM STATUS REPORT

A. Water Pollution

1. Plant Waste Neutralization Facilities Project

The Engineering Department is on schedule on the design of these facilities. Location of the new underground sewer lines is firm, sizing of the neutralization vessels complete, and design of the pH control instrumentation in progress. We are preparing a draft of the Project Reason Sheet, and expect to circulate it for approvals by November 23. Engineering expects to transmit the C.C.E. late in December and the project part two should be submitted for approval in January 1971.

2. County Sewage Pumping Station

We recently purchased new parts for the county sewer pumps, exclusively on plant wastes, to replace those damaged by our acidic discharges. A brief outage period on September 28, was scheduled by the county maintenance crew for necessary repairs. This resulted in the overflow of plant wastes to the Christina River for approximately one hour. The State Water and Air Resources Commission was informed of the need for the outage.

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A corrosion leak occurred in a short section of cast iron sewer main on the plant on October 23. Leakage was directly to the river. Temporary repairs were made immediately, and permanent repairs were completed on November 3.

Our efforts to decrease the amount of, or to neutralize the acidic plant wastes to the county sewer have resulted in significant progress in the past two months. The diversion of a predominantly caustic waste stream in the CPC area from the Christina to the sewer has been the major factor, with modifications to filtrate piping in the QA finishing area also beneficial. Corrosion in the county pumping station will be decreased by these and other continuing efforts.

3. Student Coalition for the Environment

Recent activities of this University of Delaware group have included investigations of the Newport plant, including samples of our effluent to the Christina River and photographs of our plant discharge lines. The possibility of a lawsuit under the Rivers and Harbors Act of 1899 was cited. We have expedited our efforts to eliminate minor contaminated discharges and unsightly discharge lines on the river bank. We are maintaining contact with the coalition's activities.

4. Waste Acid Disposal

We have supplied samples of our strong (~20%) waste acid to Rollins-Purle, who will quote on a disposal cost. Their technique consists of neutralization and filtration, followed by landfill or ocean disposal of the solids sludge. It is interesting to note that Rollins-Purle considers ocean disposal as the ultimate long range solution to acid waste, and contemplates an acid-lined barge similar to ours.

B. Air Pollution

1. CPC Fume Abatement

Control of pH in the CPC 903 scrubber system continues to be the major factor in improved fume abatement.

Only one justified fume complaint was received this year during the critical March through September period, compared with eight in 1969.

2. Reduced Kerosene Evolution

We have recently tested an experimental rotoclone system for removal of kerosene from the CPC tray dryer exhausts. Kerosene recovery has been encouraging and somewhat higher than that predicted by ESD consultants. Tests are continuing. In addition to a significant reduction in hydrocarbon discharge to the atmosphere, there is a potential for cost reduction.

C. Miscellaneous

1. We have done extensive sampling of the plant's abandoned solids disposal area south of the Christina River. Detailed results to date are given in the attached report.

2. New Castle County's Master Sewerage Plan includes a new 6-foot diameter force main which must traverse the Newport plant or the adjacent Koppers property. Our suggestions have resulted in the county's abandoning its original plan to cross our developed area. We are working with the county and its consulting engineers to determine the best location for this line.

E. L. RODOWSKAS, PLANT MANAGER

R M Haire

R. M. HAIRE
SUPERVISOR-PROCESS CONTROL

RMH/fc